

Application No.:09/xxx,xxx
Amendment dated: November 10, 2003
Reply to Office Action of

d.) Remarks

Claims 1-12 and 14-17 are pending in this application.

An amendment has been made to the specification. Specifically, the fiber lens is now described in the specification as "wedge-shaped". This material was added in response to the specification objection relating to antecedent basis for the claimed subject matter. Applicant thanks Examiner for this helpful suggestion concerning the improvements to the specification.

Applicant requests clarification of the status of the pending action. On the Office Action summary page, the action was indicated as both a final action and a non-final Office Action. That is, both boxes 2(a) and 2(b) were "checked".

Turning now to the merits, claims 1-5, 7-11, and 16 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. No. 5,563,969 to Honmou in view of U.S. Pat. No. 6,301,406 to Irie, *et al.* This rejection is respectfully traversed.

In essence, the rejection cites the Honmou, *et al.* patent for the use of a diffraction pattern to control fusing. The Irie, *et al.* patent is cited for teaching wedge-shaped lenses.

It is respectfully believed that the present claimed invention is not obvious. Specifically, only the present inventors have disclosed a method for fusing a wedge-shaped optical fiber lens.

In the past, fiber lenses have been fabricated by fusing. Optic fibers have also been manufactured by polishing.

Only the present inventors have understood the advantages associated with forming wedge-shaped fiber lenses by polishing, detecting an aspect ratio of the diffraction pattern of the light exiting from the fiber lens, and then fusing in response to this aspect ratio.

The Honmou, *et al.* patent describes electro-fusing in response to the diameter. However, such a measure generally might not be entirely appropriate for wedge-shaped

Application No.: 09/xxx,xxx
Amendment dated: November 10, 2003
Reply to Office Action of

lenses, since they are non-circular symmetric. As a result, the present inventors use the aspect ratio as a measure for controlling fusing.

In short, none of the applied references describes that polished wedge-shaped lenses should be fused in a feedback process. Moreover, none of the applied references discloses or suggests that fiber lenses should be fused in response to the aspect ratio of the emitted admitted light, since the Honmou, *et al.* patent only teaches fusing in response to diameters.

For the foregoing reasons, Applicants believe that the present rejection should be withdrawn.

For similar reasons, Applicants further believe that the rejection of claim 6, 12, 14, 15, and 17 under 35 U.S.C. 103 over the Honmou, *et al.* patent, in view of the Irie, *et al.* patent, and in further view of U.S. Pat. No. 4,758,886, to Fanning should be withdrawn. Specifically, the Fanning reference fails to show or suggest the process steps described hereinabove.

Applicants believe that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

AXSUN TECHNOLOGIES, INC.

By 

J. Grant Houston, Esq.

Registration No.: 35,900

Tel.: (978) 439 3479

Fax: (978) 262-0035

Billerica, Massachusetts 01821

Date: 10 November 2003